AIR UNIVERSITY

The Quick Response Air Force

Decisive Expeditionary Airpower for the Future?

G. Larry Thompson, Major, USAF

School of Advanced Airpower Studies

The Quick Response Air Force

Decisive Expeditionary Airpower for the Future?

G. LARRY THOMPSON, Maj, USAF
School of Advanced Airpower Studies

THESIS PRESENTED TO THE FACULTY OF
THE SCHOOL OF ADVANCED AIRPOWER STUDIES,
MAXWELL AIR FORCE BASE, ALABAMA, FOR COMPLETION
OF GRADUATION REQUIREMENTS, ACADEMIC YEAR 1995–96.

Air University Press
Maxwell Air Force Base, Alabama

June 1996

Disclaimer

Contents

Abstract

In his National Security Strategy, President William J. Clinton emphasized that the United States will remain globally engaged for many years to come, and that an integral part of that engagement will be the projection of military power. In the midst of budget cuts, personnel reductions, and base closures, the United States Department of Defense (DOD) is in a dilemma. It is being called on to be the dominant instrument of power in many regions of the world while its people and equipment are being stretched to their limits. Senior leaders are expressing serious concern for the operations tempo and are looking for relief. Unfortunately, the post-cold-war, multipolar world is producing complex and unpredictable challenges with no end in sight. The DOD is being tasked to deter aggression, provide regional stability, support emerging democracies, and provide disaster relief. In many cases these tasks depend heavily on a forward presence. Prior to base closures and drawdowns, much of this presence was in the form of permanent overseas bases and large numbers of forces transported to any place in the world. This is no longer the case and the question now is how to efficiently and effectively meet these challenges. Airpower offers the balanced solution. Its responsiveness, global reach, and flexibility generally give it an advantage over other military instruments in unexpected crises. Airpower is becoming the dominant quick-response weapon of choice in joint operations for the National Command Authorities (NCA). This study asks: How should the US military structure its forces to provide the NCA an on-call, sustainable, and responsive airpower force worldwide?

This analysis concludes the answer is to reorganize existing forces into a Quick Response Airpower Force (QRAF). The QRAF concept involves a force structure that can help reduce the operations tempo in the DOD by replacing forward presence with a credible continental United States-based, quick response, deterrent force. This group of forces can be tailored to the unpredictable challenges of the future. In addition, it can allow the NCA the use of a force while avoiding putting a significant (and possibly unpopular) number of Americans in harm's way. The QRAF concept is divided into three levels: Level 1—a standing QRAF of collocated units, organized, trained and equipped for tasking at any time, any where; Level 2—a preplanned QRAF of geographically separated units organized and designed well in advance for a specific deployment; and Level 3—an ad hoc QRAF employed if Levels 1 and 2 are already occupied or committed.

This study presents a discussion and background of the problem, its importance, related problems, and past attempts at solutions. It offers a framework describing a quick response force and what it should be capable of doing. After discussing the current US Air Force attempts to provide this capability, the composite wing and the Airpower Expeditionary Force, the force of tomorrow—the three-tiered QRAF—is presented. The study concludes with recommendations for further study, limitations of the analysis, and its implications.

Airpower is becoming the flexible, no-notice weapon of choice. Part of this airpower is the United States Air Force and part of the Air Force should be organized into the QRAF.

About the Author

Maj G. Larry Thompson graduated from the Virginia Military Institute in May 1982. Following undergraduate navigator training in 1983 and a year of RF-4C training, he was assigned to Shaw Air Force Base (AFB), South Carolina, as a weapons systems officer. After graduation from undergraduate pilot training in 1987 and F-16 training in 1988, Major Thompson was again assigned to Shaw AFB where he became an instructor pilot and flight evaluator, subsequently flying with the 33d Tactical Fighter Squadron during Operation Desert Shield/Desert Storm.

Afterward, Major Thompson was assigned to MacDill AFB, Florida, where he served as a F-16 replacement training unit instructor pilot and then as flight commander in the 62d and 61st Fighter Squadrons. After serving as an instructor and flight commander in the 80th Fighter Squadron at Kunsan Air Base, Republic of Korea, he attended the Air Command and Staff College at Maxwell AFB, Alabama, graduating in 1995. He was then selected to attend the School of Advanced Airpower Studies (SAAS) at Maxwell. Major Thompson holds a bachelor's degree in civil engineering from the Virginia Military Institute, a master's degree in aeronautical science from Embry–Riddle Aeronautical University, and a master's degree in airpower art and science from SAAS. In July 1996 he was assigned to the Operational Issues Group for the USAF Air Force Deputy Chief of Staff for Plans and Operations in Washington, D.C.

Acknowledgments

As I look back at the experience of creating this paper, it occurs to me that no task has been as important or as difficult as completing this section. This project relied heavily on people—people in personal interviews, discussions, and observations. During the process of setting up and conducting the interviews, I was constantly amazed at the willingness of so many people to help me, talk to me, and/or point me in the right direction. Without exception every interview went well over its scheduled time because the interviewee was genuinely interested in helping me. I can never adequately express my appreciation to them or their staffs—staffs that adjusted schedules and ensured that I was granted free and extensive access to a host of very busy people. The professionalism, pride, and enthusiasm in the Air Force, airpower, and their individual units was evident all the way from the senior officers to the youngest airmen I spoke with. It was an encouraging experience.

I would like to acknowledge several people without whose support and assistance this study would not be possible. I want to thank Lt Gens John P. Jumper and James F. Record; Brig Gens Timothy A. Kinnan and William A. Peck Jr.; and Colonels Ranne, Remington, and Welsh for their assistance and for a substantial piece of their limited schedules. These individuals, among many others, not only granted me extensive personal interviews, but allowed me unrestricted access to their organizations. This study depended heavily on their ideas, opinions, and passions, and I am in their debt.

Whereas the leadership provided the bulk of the information, I would have never received a single idea were it not for the people who put my name on their bosses' schedule based on nothing but a phone call from a "major in Alabama." Along with these people, there are those that gave me their time to explain concepts, their unit's operation, or points of contact crucial in my finding and talking to the right people. Although the list is long, it is no average list of names! Each name represents a dedicated professional who voluntarily and unselfishly offered me assistance. They include Lieutenant Colonels Emery, Fawcett, Johnson, Kahao, McKinley, Veshosky, and Waterstreet; Majors Andrews, Crane, Gallagher, Greenfield, Harwell, Johnston, Neuenswander, Sherman, Sturck, Walden, and Wilson; Captain Peirgrosse; and Ms Jean Barrineau, Ms Midge Hickman, and Ms Jean Harper.

I am grateful to SAAS for the unrestricted opportunity to travel and conduct multiple interviews. I thank my reader, Dr. David Mets, for his patience with my many grammatical atrocities, and to whom I believe I owe a red pen. I thank Maj Randy Bright for being the mother of all sounding boards, and for being a great sport and travel agent. I also thank my wife Michele for the weekend of proofreading.

Most of all I wish to thank my advisor, Col "Buster" McCrabb, for the hour-long "got a minute?" sessions, the multiple changes to the plan, the patient explanations of the basics of air operations, and the "How exactly did you get in this program?" discussions that brought me back to reality. I know it's your job, but my case was definitely above and beyond the call of duty.

Thank you all.

Chapter 1

Introduction

The need for American Leadership abroad remains as strong as ever. I am committed to forging a new public consensus to sustain our active engagement abroad in pursuit of our cherished goal—a more secure world where democracy and free markets know no borders.

—President William J. Clinton
A National Security Strategy of Engagement and Enlargement
February 1996

In October 1994, a mere three and one-half years after the conclusion of the Persian Gulf War, Iraqi president Saddam Hussein massed combat troops along his southern border, again threatening Kuwait and northern Saudi Arabia. The United States (US) responded with Operation Vigilant Warrior, which successfully prevented a further Iraqi advance and demonstrated the US commitment and resolve to uphold the peace and stability in the region. In the first 10 days, forces of the United States Central Command Air Forces (USCENTAF) flew over 1,000 Vigilant Warrior sorties and nearly tripled the number of combat aircraft in-theater.[1] The operation was considered a success and led Secretary of Defense William J. Perry to say, "The Air Force has really deterred a war. When we deployed F-15s, F-16s, and A-10s in large numbers, I think they got the message very quickly."[2] Although the mission was accomplished, the unpredictable and provocative Iraqi act was a clear reminder of the problems facing the United States in the post-cold-war world. Saddam's actions underscored the need to present a credible deterrent to would-be aggressors around the world. While studying the lesson, Lt Gen John P. Jumper—commander of USCENTAF and of the United States Air Force's (USAF) Ninth Air Force—began to consider the efficiency of the operation and the USAF's ability to readily respond worldwide.

Mindful of reductions in US forward presence overseas, he saw the increasing need for a rapidly deployable US airpower force. General Jumper asked, "How can we get back to responsive and reliable airpower that can deter and rapidly react? Fundamentally, how can we put the word 'expeditionary' back into our vocabulary?"[3] In this study I explore these questions. Specifically, I will examine the question: How should the USAF structure its forces to provide the National Command Authorities (NCA) an on-call capability for a sustainable and responsive airpower force worldwide?

This study is presented in six chapters. Chapter 2 contains an in-depth background and discussion of the problem, its importance, related problems,

and past attempts at solutions. In chapter 3, I offer a framework describing what the force that I call a QRAF (pronounced Q-RAF) should look like and be capable of doing. Chapter 4 contains the force today and the current attempts of the USAF to provide this capability, including the composite wing and Airpower Expeditionary Force. This chapter details their history and evolution, current status, problems, and possible solutions. Chapter 5 is my recommendation for further study, a discussion of the limitations of this analysis, its implications, and concluding remarks.

The dilemma is real and immediate. By the end of 1995 the US Department of Defense (DOD) closed 54 percent of its overseas facilities (about 900 sites).[4] The United States is no longer able to rely strictly on permanent forward presence to deter and fight if need be. We must determine the best mix of organizational effectiveness and efficiency to allow a predominantly continental United States (CONUS)-based force to provide for overseas airpower.

Notes

1. The peak combat aircraft strength for Operation Vigilant Warrior was 189. Prior to that, the continuous forward presence in the region was 67 aircraft. Department of Defense (DOD), *Report of the Secretary of Defense to the President and the Congress* (Washington, D.C.: Government Printing Office, 1995), 293.

2. Ibid., 294.

3. Lt Gen John P. Jumper, USAF, commander, United States Central Command Air Forces and Ninth Air Force, interviewed by author, Sumter, South Carolina, 20 February 1996.

4. DOD, *Report of the Secretary of Defense*, 137.

Chapter 2

The Problem

The new world environment required a new National Security Strategy aimed at providing stability for the emergence of new democracies. The Air Force is fully engaged in support of that strategy. While personnel strength has fallen a third across the force and 50 percent overseas, the number of people on temporary duty overseas is up fourfold since the Berlin Wall fell.

—Secretary Sheila E. Widnall
Report of the Secretary of the Air Force,
Annual Report to the President and the Congress
February 1995

The Situation

As Secretary Widnall states, the United States Air Force is facing many new challenges in the aftermath of the fall of the wall and the evolution of a new world order. The newly defined multipolar world has produced complex and unpredictable challenges to the Air Force and the rest of the US military forces. Many domestic and international factors combine to complicate matters and redefine many of the problems. Domestically, many Americans are more isolationist and have a hard time understanding why they need to have thousands of troops permanently forward-deployed in Europe, Asia and the Middle East. Americans want to spend their long-awaited post-cold-war "peace dividend." Meanwhile internationally, the Saddam Husseins of the world no longer seem to operate under the responsible and logical rules that once defined the bipolar cold-war landscape. Deterrence against aggression and hegemony is still in the best interests of the United States, and it is consistent with the National Security Strategy.

These competing interests, among many others, combine to create a dilemma for the United States. It has found itself in the ironic position of reducing forces and forward presence overseas while increasing operations tempo and its commitments worldwide. In the face of these forces and forward presence reductions, the issue of "Getting There versus Being There" is even more critical.[1] The service departments are stretched thin. The US Navy can no longer maintain a carrier battle group presence year round in the Persian Gulf region (a problem known as the "carrier gap").[2] In the US Air Force, people are sent on overseas deployments in unprecedented numbers to make up for shortfalls in personnel and equipment, carrier gaps, and the reduced permanent forward presence worldwide. Personnel deployments are up fourfold in as many years.[3] Not surprisingly, people and equipment are pushed to the limit. The 1995 official USAF

Quality of Life Survey found that worldwide temporary duty (TDY) is having a significant impact on quality of life.

This is a problem the USAF chief of staff, Gen Ronald Fogleman, admits he's concerned about.[4] One-third of the enlisted force, over one-third of nonrated officers, and nearly one-half of the rated officers surveyed reported TDY-related personal problems. One-quarter of the rated officers were away from home for over 90 days in the past year;[5] meanwhile some units report abnormally high divorce rates.[6] Unfortunately, there appears to be no end in sight. According to Lt Gen Michael McGinty, the USAF deputy chief of staff for personnel, operating tempo "for many of our units remains high, and it will likely increase."[7] In the face of this turmoil, the challenge to the United States and the US Air Force is to determine how to mix the multitude of commitments with easing the burden on its most precious resource—its people. US military forces based primarily in the CONUS can not be everywhere at all times, but they must be ready at all times to support and protect US national interests abroad. Secretary of Defense William Perry emphasized this in his 1995 Annual Report to Congress:

> American leadership in the world today has never been more important than it is today . . . without active US leadership and engagement abroad, threats will worsen and opportunities will narrow. . . . If America chooses not to lead in the post-cold-war world, it will become less secure.[8]

Understanding this fundamental importance of US leadership and engagement and recognizing that the nation is constrained by its current level forward presence, we come to the core question. How can the CONUS-based force provide a credible overseas presence? I believe the answer is airpower.

Background

Airpower is inherently responsive, flexible, and strategic in nature.[9] It can be a large part of the solution. The simple answer is to build an airpower force that is rapidly deployable, sustainable, and credible enough to deter aggression, demonstrate continued US commitment to its allies, and defend its interests when necessary. While this may sound simple, making it happen is certainly complicated. Details on what is available for airpower, how it can be used, and by what can be done in the future are discussed in chapters 4, 5, and 6 respectively. In analyzing what we have and what we should do, we first need to construct a framework to enable us to compare the different options and recommendations.

Before turning to these questions and the framework, we should look to the past and realize that these problems and questions are not new. As long as the United States has had airpower, competition between the desire to keep it "near the action" and the practical limits of basing of aircraft has existed. Recently declassified examples of this are the Constant Guard operations in Southeast Asia, the Crested Cap operations in Europe during the cold war, and the Rapid Deployment Joint Task Force (RDJTF) concept that gave birth to the present-day United States Central Command.

Constant Guard

On 30 March 1972, the North Vietnamese Army launched its Easter offensive. This attack came in the wake of major US drawdown in the region. The US "Vietnamization" plan pushed American strength down from a peak of approximately 500,000 troops to 69,000 troops by May of 1972. By the time of the Easter offensive, the USAF had already handed over four bases to South Vietnam and had reduced its numbers of aircraft from a high of about 535 to around 375.[10] Gen Creighton W. Abrams, commander of the US Military Assistance Command, Vietnam (COMUSMACV), realized the in-theater airpower assets were inadequate and requested reinforcements on 5 April 1972. The Joint Chiefs of Staff (JCS) approved his request that same day and the rapid deployment of CONUS-based Tactical Air Command assigned fighter-bombers was set in motion.[11] There were four separate deployments known as "Constant Guard I-IV," which were the largest and fastest moves of US tactical aircraft up to that time. Between 11 April and 13 May, 200 fighters, bombers, and support aircraft deployed from the United States to various bases in Thailand.[12] When Gen Lucius D. Clay, commander of the USAF Pacific Air Forces (PACAF), remarked on the operation's effectiveness, he summed up the Constant Guard deployments by commenting,

> I think probably the most significant change in airpower over the last 25 years . . . is this complete flexibility and our capacity to respond at a moment's notice. If anybody had told me 25 years ago that you could take a fighter wing out of Holloman Air Force Base, New Mexico, and have it overseas in less than a week and have it flying in combat, I'd have said "you're nuts!". . . I think (this exercise) shows that our flexibility to go *anywhere in the world and do the job assigned.* It's simply a fantastic operation.[13]

This problem of having to bring significant forces overseas to rapidly reinforce an operation certainly isn't new. While looking at the Constant Guard deployments, the need to have a plan before forces are actually needed in-theater is apparent. When creating a present-day QRAF, the USAF should not overlook these past lessons, nor should it be content with its successes.

Crested Cap

The problem of not being able to devote aircraft to an individual theater is also nothing new. During the cold war the United States committed significant forces to the North American Treaty Organization (NATO) in defense of Western Europe. In 1968 there emerged the need to reduce the number of troops stationed in Europe as well as to reduce the unfavorable balance of payments. Out of this came a trilateral agreement between the United States, Great Britain, and West Germany. The agreement allowed the United States to remove 35,000 troops and 96 tactical aircraft from Germany back to the CONUS.[14] The pact stipulated that the forces would

return to Germany annually to exercise. The US Army portion of the annual exercise was named REFORGER (the Return of Forces to Germany), while the USAF portion was called "Crested Cap" (originally named Heavy Draw).[15]

Crested Cap represented a plan to return four complete fighter squadrons to the United States. The plan continued with an assurance to bring them back to Germany each year for a 30-day period to "test the force capability to deploy and regroup, and the capability of assigned bases to support the reconstituted units."[16] Squadrons brought back to the United States were still aligned with a base in Germany. These units were known as "dual-based squadrons" and were evaluated annually on their ability to deploy and employ their combat airpower and support assets.[17] The original USAF plan stated that, "Timely strategic warning, recognized and coupled with increased force mobility will substitute for some of the current in-place forces in Europe."[18] This is as important for the US force today as it was in 1968. The American commitment to NATO was firm and Crested Cap exercises were accomplished in nine out of the first 10 years the plan was in force.[19] Generally the squadrons were deployed during the Army's REFORGER exercises to test the entire system and to demonstrate the strong US support of NATO. Although the concept was never field-tested in a war on the European plain, some of the same reasons for its creation are with us today. We can profit from the Crested Cap experience as we attempt to solve current and future problems.

Rapid Deployment Joint Task Force (RDJTF)

The last example is from the late 1970s. It shows that the concept of a Quick Response Airpower Force is not new. It also shows why it should have been developed earlier. On 18 August 1977, President Jimmy Carter directed the creation of a flexible military force to cope with potential emergencies outside the areas of NATO and Korea. This "Carter Doctrine" called for a new American commitment to the Middle East. Any outside power threatening Persian Gulf stability would be viewed as acting against the United States' vital interests.[20]

Unfortunately it took a series of major crises and more than two years to get the idea off of the drawing board. In 1979 the crises that awakened the policy makers were the Iranian revolution in January, the taking of 52 American hostages in Iran in November, and the Soviet invasion of Afghanistan in December.[21]

Gen H. Norman Schwarzkopf, at the time a brigadier general and the plans and policy chief of US Pacific Command (USPACOM), recalls in his autobiography, *It Doesn't Take a Hero*, his disbelief upon discovering how ill-prepared the United States was in the region:

> We were called upon to help outline military options for President Jimmy Carter. I was astounded to learn that that our military could offer him almost none. Our Army had almost no forces ready to fight in the Middle East; our Air Force had

> no access to the region's airfields and only limited use of its airspace; and our Navy insisted that the waters of the Persian Gulf were too constricted to accommodate its big aircraft carriers. In desperation we asked the Strategic Air Command about dispatching a massive B-52 strike . . . SAC advised us that it would have such difficulty positioning tankers for aerial refueling that the maximum number of B-52s we could launch against Iran simultaneously was two.[22]

Finally in March 1980 the Rapid Deployment Joint Task Force, also known as the RDF, was formed in a converted alert bunker at MacDill Air Force Base (AFB) in Tampa, Florida. Its mission was to "plan, jointly train, exercise, and be prepared to deploy and employ designated forces in responses to contingencies threatening U.S. vital interests."[23] Brig Gen Carl Stiner, at the time the RDF chief of staff, expanded on the definition of the force:

> The Rapid Deployment Force is a force in transition and a force to be reckoned with. It's not the paper tiger or the "small" tripwire some make it out to be . . . the principal purpose of the Rapid Deployment Force is deterrence of the Soviets and assistance to our allies. But should deterrence fail, your Rapid Deployment Force will be ready, and will optimize the combined firepower and resources our nation has provided to all of our military services, and I assure you—you will be proud of the performance and I am confident that the strategy and the force will be successful.[24]

The force quickly became stronger and more relevant. In its first year the RDF participated in no less than 10 exercises. In 1981 Secretary of Defense Caspar W. Weinberger decided the importance of the mission warranted its being a unified command under the Joint Chiefs of Staff. In the year leading up to becoming a unified command, its strength was more than doubled. The RDJTF officially became a unified command on 1 January 1983 and was redesignated the US Central Command (USCENTCOM).[25] The air component of USCENTCOM was then designated the US Central Command Air Forces (USCENTAF). Both organizations would be instrumental in the coalition effort in the Persian Gulf War eight years later.

While many declared the RDF concept and its test in 1990–91 a resounding success, others point to the six-month buildup prior to the coalition air attacks. This point cannot be overlooked and leads to the challenge for today. The USAF must determine what, if any, reorganization and redesign it needs to meet the challenge without having forward-deployed troops or taking six months to prepare. In addition, the United States must keep in mind that the Middle East is not, and will not, be the only area of interest. A capability of short-notice deployment and employment of military power anywhere in the world must be maintained. The RDF project in many ways paved the way for the Quick Reaction Airpower Force today. Issues concerning basing, sustainment, mobility, international agreements, interservice rivalries, and force mixes continue to be as contentious today as they were then. Each of these is addressed in later chapters, but first we should consider what characteristics a QRAF should have. We examine these desired and required traits in chapter 3.

Notes

1. See Dennis M. Drew and Donald M. Snow, *Making Strategy: An Introduction to National Security Processes and Problems* (Maxwell Air Force Base (AFB), Ala.: Air University Press, 1988), 179–81, for an explanation of the getting there versus being there dilemma.

2. Julie Bird, "Fighters, tankers get Jordan job," *Air Force Times*, 18 March 1996, 4.

3. Department of Defense (DOD), *Report of the Secretary of Defense to the President and the Congress* (Washington, D.C.: Government Printing Office, 1995), 296.

4. Gen Ronald R. Fogleman, USAF chief of staff, address to Air Force Association convention, September 1995, quoted in Peter Grier, "Convention '95: Looking Back, Looking Ahead," *Air Force Magazine*, November 1995, 83–86.

5. Peter Grier, "The Quality of Military Life," *Air Force Magazine*, December 1995, 30–35.

6. General Record emphasized this point by quoting a 45 percent divorce rate in a USAF Red Horse Civil Engineering Squadron in the previous year. Lt Gen James F. Record, USAF, commander, Twelfth Air Force, interviewed by author, Tucson, Arizona, 6 March 1996.

7. Rick Maze, "Reducing the pace of deployments proves hard," *Air Force Times*, 25 March 1996, 3.

8. DOD, *Report of the Secretary of Defense*, 1.

9. Col Phillip S. Meilinger, USAF, *10 Propositions Regarding Air Power* (Washington, D.C.: Air Force History and Museums Program, 1995), 8–13.

10. Eduard M. Mark, *Aerial Interdiction: Air Power and the Land Battle in Three American Wars* (Washington, D.C.: Center for Air Force History, 1994), 371.

11. Col John A. Doglione et al., *Airpower and the 1972 Spring Invasion* (Washington, D.C.: United States Air Force, Office of Air Force History, 1985), 17.

12. Ibid., 26.

13. Ibid.

14. Maj David P. Mott, USAF, "An Operational Analysis of Exercise Crested Cap," research report (Maxwell AFB, Ala.: Air Command and Staff College, May 1978), 1.

15. The original name "Heavy Draw" was changed to Crested Cap to avoid sending the undesired message to the NATO allies that the operation was a heavy draw of forces away from the region. Undated message from AFXPDW, attached to Headquarters USAF, Directorate of Plans, subject: "Crested Cap Rotational Plan – Tactical Fighter Forces in Germany" (Washington, D.C.: Headquarters USAF, 15 May 1967).

16. Directorate of Plans, "Crested Cap Rotational Plan," 4.

17. The author was in a dual-based squadron in 1984–1986 that deployed to Europe for a thirty-day period in 1986. The squadron was evaluated by both the US Air Forces Europe and NATO.

18. Directorate of Plans, "Crested Cap Rotational Plan," 1.

19. Mott, 1.

20. Frederick H. Hartmann and Robert L. Wendzel, *America's Foreign Policy in a Changing World* (New York: HarperCollins College Publishers, 1994), 293.

21. Lt Col Jimmie W. Hanes, USAF, "Rapid Deployment Force: Problems and Prospects," research paper (Columbus, Ohio: Ohio State University, May 1982), 1.

22. Gen H. Norman Schwarzkopf, USA, *It Doesn't Take a Hero* (New York: Bantam Books, 1992), 220.

23. Fact Sheet (Tampa, Fla.: Public Affairs Office, Headquarters Rapid Deployment Training, November 1981), 1, quoted in Hanes, 3.

24. Brig Gen Carl W. Steiner, USA, briefing to American Institute of Aeronautics and Astronautics Commission, Boston, Mass., and Washington, D.C., 10 and 14 December, 1981.

25. Hanes, 2.

Chapter 3

The Force Requirement

Defense budgets are declining along with military resources. This has instigated a silent revolution, albeit a revolution nonetheless. Before this century ends, defense budgets will shrink to less than half of their 1988 Cold war apogee. A drop of this magnitude will inevitably change how we think about, plan, and build our defenses.

—Gen John M. Shalikashvili
"A Word from the Chairman,"
Joint Force Quarterly,
Autumn/Winter 1994–95

Airpower has the potential to take the lead in the revolution that General Shalikashvili refers to. Part of this revolution will be the "perfect" Quick Response Airpower Force or something close to it. The perfect QRAF may never be obtainable, but that should not stop the US Air Force from working towards that end. How should this QRAF look? How do we describe what it should be capable of doing? Using the case studies and discussions from the previous chapter, we can identify certain characteristics that are either required or desired in a QRAF. A QRAF must address all the problems described in chapter 2, in addition to being ready for the problems of the future. It must be a coordinated, responsive, deployable, flexible, sustainable, and powerful airpower force. The QRAF must have a robust system of command, control, and communications (C^3), and be capable of operating with a minimum of direction during execution, particularly in the early phases of deployment and deployed operations. It should be capable of efficiently deploying and employing maximum firepower with a minimum of support. The Quick Response Air Force needs to gain and maintain credibility so that it can deter aggression without a robust and costly forward presence. It must also demonstrate US commitment to its allies' security without that forward presence. Its forward locations should be preplanned, coordinated, and presurveyed to the maximum extent possible. Attendant to these requirements, the force should have multiple mission and mission support capabilities allowing it to support itself in combat operations. The force should not be constrained by relying on a majority of outside organizations and equipment to accomplish its given mission.

The QRAF must conduct intense multitask training to allow it to become a consolidated multimission force, task-organized, and focused on the objective. Lastly, it should be an organization receptive to new and resourceful ideas. Because of its responsive and flexible nature, the organization should be constantly looking for innovations to make the

operation quicker, better, and stronger. All of these contribute in one way or another to the seven tenets or "truths" of airpower.

Tenets of Airpower

In Air Force Manual (AFM)1-1, *Basic Aerospace Doctrine of the United States Air Force*, "Essay M" begins by explaining that the tenets of airpower and the principles of war are the basis for aerospace power employment. It continues in saying that the tenets are "the most fundamental truths about war in the third dimension" but are not hard and fast nor to be blindly followed.[1] In the rest of this chapter these tenets will serve as a framework for us to examine the desired characteristics of a QRAF. They will also be used to judge whether they enhance the power projection of the US Air Force. "Essay M" ends by explaining that the tenets "are interconnected, overlapping, and often interlocking."[2] Because of this interlocking nature, if we attempt to explain how each QRAF attribute fits into one or more of the tenets, we would have a long and confusing discussion. For this reason, we approach the explanation from the opposite direction. We begin with each individual tenet and detail some of the QRAF features that contribute to that principle. Note that many of the attributes as well as the tenets are complementary and interwoven as AFM 1-1 predicts.

Centralized Control/Decentralized Execution

The first tenet is the "master tenet."[3] A Quick Response Airpower Force relies on the complementary concepts of this tenet. The force must be connected to the centralized control, in most cases an air operations center (AOC), so that it can be integrated into a master air plan supporting the theater commander's objectives. This is why the QRAF has a robust C^3 system. The second concept, decentralized execution, is a central advantage to a QRAF. Its ability to operate with a minimum of direction and outside support during deployment and execution of the air attack plan is a significant strength. Preplanned and presurveyed forward locations can contribute to a rapid and decentralized QRAF deployment. Intense multimission training permits the force to adapt to dynamic situations and respond to opportunities without being hampered by a centralized execution authority.

Flexibility and Versatility

This second tenet pervades virtually every desired feature of the Quick Response Airpower Force. Flexibility and versatility enable the QRAF to respond rapidly, deploy to a number of locations, and employ in a number of different missions. It also exploits airpower's inherent ability to strike a variety of targets throughout a theater. In addition, a flexible and versatile QRAF will have personnel constantly looking to new and improved tactics and techniques to accomplish their missions. The structure and

culture allows more experimentation to test these new techniques and innovations.

Priority

AFM 1-1 states: "air commanders must have a rational set of priorities to avoid squandering their resources on targets of marginal importance."[4] This could refer to independent targets, multiple target tasks, or complete battles. In any event, a QRAF with coordinated training, flexibility, and responsiveness—combined with a decentralized execution ability—can prioritize and apply its tasks where they can be most effective. Capable of accomplishing many direct and indirect support missions in an autonomous fashion, the force maximizes its sustained efforts. This ability to control priorities will also be advantageous in the rapid and light deployment of the force. Under its own central prioritization scheme, the QRAF can judiciously eliminate unnecessary redundancies in personnel and equipment when speed and lift are critical.

Synergy

Webster's dictionary defines synergism as a "cooperative action of discrete agencies such that the total effect is greater than the sum of the effects taken independently."[5] This may be the airpower principle that is best attended to by a Quick Response Airpower Force. While it is difficult to separate from the other tenets, it is easy to see the desired features of the QRAF are synergistic and work together. The makeup and training of the force naturally lends itself to a synergy rarely attained by separate or ad hoc collections of airpower. Synergy should pervade every aspect of the QRAF's operations, both in peacetime preparation and wartime execution. Working together, in synergy, to plan, train, deploy, and fight as a team has obvious advantages for each element. By collectively being stronger than the sum of its parts, the QRAF can take advantage of mutual support both on the ground and in the air. The force can deploy with less and bring more coordinated force to bear.

Balance

Air Force Manual 1-1 refers to this tenet as "the obligation of the commander to balance between opportunity, necessity, and effectiveness against risk to friendly forces."[6] The idea behind this "balancing act" is that the commander may have to choose one over the other, and there may not be an easy or obvious answer. This situation could occur when an operationally critical mission has to be balanced against the risk involved to high-value assets in short supply. This can be more of a problem to airpower leaders today than it was to their predecessors because firepower is now more concentrated. Today's aircraft carry and deliver much more firepower than the aircraft of yesterday. An example is a comparison of a B-17 and a high-value F-117. Due to its accuracy, an F-117

with one bomb can theoretically do the job of squadrons of B-17s dropping over 9,000 bombs.[7] Compared to one of the B-17s, the loss of that single F-117 would have more impact on the remaining capability of force. The training of a highly skilled technician is another consideration.

The complex systems of today require extensive and time-consuming training. The education and training pipeline is generally too long to be able to replace a significant number of crews or technicians during a conflict.

The disadvantage to a Quick Response Airpower Force is that a slimmed-down force may feel more of an impact when an individual is injured or killed, or an aircraft is lost, damaged, or being repaired. On the other hand, the advantage is that the QRAF is trained and equipped to operate in the efficient and synergistic manner discussed earlier. This optimum effectiveness and increased preparedness can mean less risk of losses and less of a dilemma for the commander. The better equipped and trained the QRAF is, the easier it will be for the commander to deal with the balancing act.

Concentration

The QRAF draws on the principle of concentration for a lot of its strength. Many of the synergistic QRAF attributes apply to give it the flexibility, deployability, firepower, and credibility advantages it has over the ad hoc collections of airpower. The QRAF is equipped and trained with multiple capabilities to bring concentrated firepower to a theater with a minimum amount of equipment and personnel. Furthermore, the force is decentralized in its execution. It can plan and execute what is required to overwhelm an opponent without problems of coordination or dependence on other units. The inherent flexibility and adaptability of the QRAF can also allow it to seek new and innovative ways to concentrate its force.

Persistence

The seventh and final tenet of airpower is persistence. The importance of this principle is emphasized recently with a threefold increase in the amount of time the 366th Wing at Mountain Home AFB, Idaho, is expected to operate without resupply.[8] Like the 366th, the QRAF must be able to arrive in-theater and sustain combat operations. The QRAF has an advantage over a group of monolithic wings in that it will deploy more efficiently and operate with fewer redundancies in equipment and support. In addition, the concentrated and synergistic efforts of a Quick Response Airpower Force will allow it to keep the pressure on the adversary without relying on external support.

Another aspect of this tenet is persistence on an individual target. Generally, many critical enemy targets will be rebuilt or regenerated after being attacked. If the aim of attacking a target or target set is to keep its system or output suppressed, simply disabling or partially destroying it the first time may not be enough. The mission may necessitate ensuring

that the target is not allowed to be rebuilt or regenerated for an indefinite period of time. This continued pressure, or persistence, on the right target(s) can be a key to defeating the enemy. The QRAF will accomplish this mission by the concentration of its efforts and its self-supporting persistence in-theater. The ability of the organization to focus its synergistic efforts using its own aerial support make it well suited to apply the persistent pressure in the theater.

Airpower, through the creation of the QRAF, has the potential to take the lead in the revolution General Shalikashvili refers to. This chapter detailed the QRAF's characteristics, all of which contribute in many ways to the seven AFM 1-1 tenets or "truths" of airpower. Using the tenets, we can see how a properly designed and equipped QRAF can serve as a powerful and credible deterrent to aggression and be a tremendous force enhancer to project airpower globally. The United States Air Force currently does not have such a force, but some of its existing organizations approximate the concept.

In the next chapter we will examine two of these USAF organizations: the composite wing and the Airpower Expeditionary Force. We will use the tenets of airpower to judge whether or not they enhance the power projection of the US Air Force and what can be done to improve that capability.

Notes

1. Air Force Manual (AFM)1-1, vol. 2, *Basic Aerospace Doctrine of the United States Air Force* (Washington, D.C.: Department of the Air Force, March 1992), 113.
2. Ibid., 121.
3. Ibid., This essay provides a detailed description of each of the seven tenets of airpower, 113–24.
4. Ibid., 117.
5. *Webster's New Collegiate Dictionary* (Springfield, Mass.: G. & C. Merriam Co., 1990), 1174.
6. AFM 1-1, 118.
7. Rick Atkinson, *Crusade: The Untold Story of the Persian Gulf War* (New York: Houghton-Mifflin Co., 1993), 58.
8. Air Combat Command directed the change for the 366th Wing at Mountain Home AFB, Idaho. The wing is required to perform its mission for up to 30 days without resupply (assuming prepositioned stocks are available). This is a change from the initial tasking of 10 days. Maj Dean Wilson, USAF, flight commander, 366th Operations Support Squadron, interviewed by author, Mountain Home Air Force Base, Idaho, 18 March 1996.

Chapter 4

The Force Today

I truly believe that the United States Air Force is the economy-of-force service. Air and space power will increasingly be seen as the great enabler.

—Gen Ronald R. Fogleman

As we have discussed in previous chapters, airpower contributes significantly in creating a responsive global military force. There are many possible ways of building this force, and the USAF's experiences from the past offer valuable lessons to that end. Before creating the new force though, we need to understand what organizations are in place today and if they alone are able to accomplish the mission we have defined. Only then can we determine if a new force is necessary.

Assuming the Quick Response Airpower Force capability does not exist in the way we have described, we need to determine what the USAF can provide until the QRAF can be created. The two best available organizations to fit the need are the composite wing (CW) and the newly created Airpower Expeditionary Force (AEF). To examine them, we will continue to employ the tenets of airpower as our common lexicon. Furthermore, by this point in the discussion, a set of issues has emerged concerning the QRAF concept. In general, they all revolve around the main issue of readiness—to be ready and able to accomplish the mission under all the requirements previously described. Sub-issues can be grouped into the following: (1) deployability—is the force capable of quickly and efficiently responding with the ideal amount of support, eliminating wasted effort and material; (2) employability—does the force have the equipment, training, robust C^3, and sustainability to deter aggression and, if needed, actively defend United States interests abroad? and (3) credibility—can the force adequately convince Americans, allies, and potential aggressors that it can do all of the above?

To answer these, we now turn to the composite wing and the AEF, their evolution, their current status, and their problems and possible solutions. Keep in mind that this discussion will start by treating each one separately. By the end of the analysis, however, it should become apparent that a convenient marriage of the two may be both logical and inevitable.

The Composite Wing

In the fall of 1990, the *Airpower Journal* published an article that, according to its author, was designed to precipitate a debate. The idea was not a new one, in fact it was older than the USAF itself. Interestingly though, the

author attempted to retract the article before it was published. He believed that his newly assigned position would exert undue influence on the very debate he wished to start. The article was titled "For the Composite Wing" and was written by Gen Merrill A. McPeak, the US Air Force's new chief of staff.[1] He thus began the newest cycle of the "on-again, off-again" composite wing organization in the United States Air Force.

History and Evolution

When General McPeak started the process to create the modern composite wing, he was resurrecting a concept that began long before the US Air Force existed. Composite groupings of aircraft, whether under the name "composite wing" or not, date at least as far back as 1918 when the lst Corps Observation Group was made up of three different airframe types.[2] Although the only reason the Spad Xls, Sopwith Camels, and Renault ARs of the 1st Group were combined was because of a shortage of aircraft, it was the Air Service's first taste of composite operations. It was also the beginning of a long line of composite groupings. In every war and major conflict since then, the air arm of the United States has operated some type of composite group. Throughout the years these organizations have taken many forms and have been created for many purposes.[3]

Just a few among these are the Composite Air Strike Force (CASF), formed in 1955,[4] the First Air Commando Group created in 1961, and the 432d Tactical Reconnaissance Wing formed in 1966.[5] Recent examples of composite wings in support of combat operations include the 7440th CW (Provisional) in Operation Desert Storm,[6] and the 31st Fighter Wing at Aviano Air Base (AB), Italy, supporting operations in Bosnia.[7]

The composite wing concept is not universally accepted in the US military. Traditionally, the issues involving composite groupings of airpower have centered on arguments of effectiveness versus efficiency. Typically the question is whether the composite wing's advantage in combat effectiveness and responsiveness is worth the extra cost over the alternative monolithic groups. Volumes have been written arguing for and against composite wings. The RAND Corporation,[8] the General Accounting Office (reporting to the US House of Representatives),[9] and the USAF Air Combat Command Studies and Analysis Group[10] each conducted independent analyses within the last five years. This paper will not argue either side of the debate but will refer to some of their findings—in the context of the issues of this thesis only. The fundamental assumption for this analysis is that composite wings are here and until proven otherwise, they will stay. In light of major renovations at the existing composite wing installations, and programmed use of composite wings for the next fiscal year, this assumption is by and large, more than reasonable.

Current Status

To determine the present state of composite wings we examine two of the three such wings in the CONUS: the 347th Wing at Moody AFB, Georgia, and the 366th Wing at Mountain Home AFB, Idaho (the third, Pope AFB, North Carolina, will not be used in this analysis).[11]

The 347th Wing at Moody AFB is a "airland operations" composite wing composed of three different aircraft types or mission design series (MDS). The three are the F-16CG, the A/OA-10, and the C-130. The wing also has an Aerial Control Squadron that provides air surveillance, weapons control, airspace management, identification, and battle management. Wing personnel live, work, plan, train, and intend to deploy and fight together. The wing's mission is "to rapidly deploy a highly trained composite force and successfully execute air operations." The wing's training focuses on "providing direct support for ground forces"[12] and it focuses on the missions of close air support (CAS), air interdiction (AI), strategic attack (SA), and combat aerial delivery. The 347th gets most of its fighting support from organic assets. The support missions of suppression of enemy air defenses—conventional (SEAD-C), offensive counterair—air to surface (OCA-S), defensive counterair (DCA), airlift escort, and combat search and rescue (CSAR)—are often integrated into daily wing training. The wing routinely trains with the 24th Infantry Division (Mechanized) of the XVIII Airborne Corps so that it can operate with any similar Army unit with a high degree of cooperation.

The complementary capabilities of each assigned MDS and their varied mission specialties provide a unique opportunity for wing personnel. Aircrews routinely plan and brief missions involving two or three different aircraft types and missions from the wing repertoire. They are encouraged to develop and bring forth innovative ways to accomplish the composite mission. "Wing Wardays" are scheduled at least once per month and are designed to expose the wing to varied scenarios and missions and even to try out the new ideas. Some of the wardays cover missions based on the wing's area of responsibility threat. Other wardays exercise their ability to execute the missions of day CAS in a high-threat environment, night CAS, escorted airlift, resupply with threats, or CSAR.[13] The exercises enable the wing to respond as a concentrated, flexible, and versatile force. The composite wardays help the aircrews to understand how the many different missions fit together and what they can do to optimize the main effort. In effect, they gain a "bigger picture."

Col Mark Welsh, 347th Operations Group commander, has asserted that not only are the training opportunities unique but also more importantly he believes that, "A significant advantage of this wing is that we are shedding some flying community's paradigms of other flying communities." He talks of building trust and confidence in each other's abilities and capabilities and how this has produced a more cooperative and efficient fighting force. Colonel Welsh pointed out that this would not only pay big dividends for the

operation of his group but for the entire Air Force when the crews later go back to monolithic units.[14] The 347th Wing commander, Brig Gen Timothy A. Kinnan, agrees but takes the point a step further when he describes the wing's relationship with the US Army's 24th Infantry Division (ID). He believes that his wing is building a "trust relationship" with the 24th ID, which is at nearby Fort Stewart, Georgia. The two organizations are not only able to discuss their operations but they then can practice and refine them. General Kinnan makes the point that those in "DC, Langley, and Fort Monroe are too close to the budget battles and roles and missions fights. We can concentrate more on the mission."[15]

Armed with the myriad of organic assets, its capabilities, and its training philosophy, the wing is well equipped and capable to operate under the principle of decentralized execution. The wing staff generally understands its own unique capabilities better than any outside agency. It is therefore the best equipped to plan, prioritize, and concentrate its forces to accomplish its missions. The strong organizational synergy provides benefits that range from knowing what exactly is needed to deploy, to understanding how to make maximum use of every available asset. General Kinnan summed up by pointing out that in Desert Shield one of the biggest organizational challenges was cold-starting the command and control system. "Now with the 347th you have the force that is ready, with the command and control that is ready. It is a rapid reaction force."[16]

The second composite wing we will examine is the 366th "Gunfighters" of Mountain Home AFB. Like the 347th Wing, the 366th is made up with multiple of aircraft types including the F-15C, F-15E, F-16CJ, KC-135R, and the B-1B (actually located at Ellsworth AFB, South Dakota). The 366th's mission is "To provide an integrated composite force capable of delivering accurate and lethal air power day one, any time, anywhere."[17] The Gunfighters are an air intervention wing, designed to enter into a high-threat environment and deliver airpower on call. The wing trains to accomplish day/night and all-weather missions, including air interdiction, strategic attack, and offensive counter air. Like the 347th it can support itself during air operations and has defensive counter air, suppression of enemy air defenses, and air refueling capabilities. In addition, it carries with it a robust C^3 capability and a personnel deployment system that was declared a "Benchmark Candidate" by the Headquarters Air Combat Command inspector general (IG).[18]

The 366th Wing can operate in a semiautonomous fashion and is equipped to execute and prioritize missions from a centrally issued mission-type order in a decentralized manner. Not unlike the 347th Wing, the 366th's combination of missions and aircraft provide a unique opportunity for wing personnel. Col Jeffrey A. Remington, 366th Operations Group commander, echoed the remarks of the Moody AFB leadership when he talked of the advantage to the Air Force when the 366th Wing personnel are later "exported" to monolithic wings. Brig Gen William Peck points to an advantage that his wing has in morale and intersquadron

trust when he refers to wing competitions (known as "turkey shoots"). Teams are drawn from flights across each squadron, so that "A" flight from each squadron competes against "B" flight from each, and so on. "The result is the Gunfighters are airpower-oriented versus squadron-oriented. The standard community isolation and unhealthy aspects of competition aren't present at Mountain Home."[19] Training emphasizes teamwork and flexible airpower lethality.

Training missions involving multiple aircraft types and missions are commonplace, and full composite wing training (CWT) exercises are scheduled at least twice per month.[20] Colonel Remington compares the CWT to a major command flag exercise such as Red Flag.[21] The effect is the Gunfighters get the Red Flag experience twice per month via their CWTs. The exercises involve the scenarios of force projection (show of force), single objective air interventions (one mission and return), or multiple air interventions (protracted operations for up to 30 days). The scenarios enable the wing to exercise its ability to deploy and employ a synergistic and persistent airpower force from the day the aircraft arrive in-theater. Traditional problems of coordination among forces just are not a problem. As Colonel Remington put it, "When we get there we know how to operate."[22] The wing has a concentrated, first day-first strike capability. This capability is due, in large part, to its Fast Action Support Team or FAST. The FAST concept involves sending a large package of advance crews, technicians, and embedded command, control, communications, computers, and intelligence (C^4I) to the beddown base to prepare for immediate combat operations as soon as the fighters arrive. The team utilizes up to six organic KC-135Rs, the first departing eight hours after an execution order is issued. In July 1995 the wing was put to the test in an operational readiness inspection (ORI) named Operation Northern Pike, conducted by Air Combat Command (ACC). The Gunfighters were tasked to deploy to Canadian Forces Base Cold Lake, Alberta, Canada, and once there operate under a "Multiple Objective Air Intervention Scenario" for nine days. The 366th delivered all that it advertised. The ACC inspector general awarded the wing an overall excellent rating including excellent ratings in the critical subareas of deployment and combat employment. The IG identified an unprecedented seven benchmark areas, which is indicative of the 366th's open-minded, innovative, and versatile approach to problem solving. The IG summed up the Mountain Home operation in one sentence: "The 366 WG validated the benefits of the composite wing concept for combat employment."[23]

Problems and Solutions

In concluding this discussion of composite wings, we should address the issues related to the desired traits of a Quick Response Airpower Force mentioned earlier. Again, this paper will not argue for or against composite wings. The focus is strictly whether they do the job of our ideal QRAF. Admittedly, most of the solutions below involve increased expenditures on

composite wings. The assumption is that the composite wings are going to stay, so they should be funded closer to the level they need. Any dispute beyond that is well beyond the scope of this paper.

Concerning the main issue of readiness, from the examples and the ORI results above, the subissue of employability seems to be in little dispute. In terms of deployability, arguments over response time linger, but I could find no hard evidence that disputed the findings of the ORI and the opinions of virtually everyone interviewed. Also, detractors of the composite wing cite possible bottlenecks in deployment of a force from one base versus two or more. This question was posed to both composite wing commanders and their operations group commanders. All four interviewed discounted deployability as a problem. General Kinnan of the 347th explained that the only limiting factor was ramp space, and more is being constructed. General Peck of the 366th pointed out that not only was deployment not a problem (which the ORI substantiated) but that sending everything from one place, under one authority had distinctive advantages. He cited the problems from the Desert Shield deployments, where competing interests vied for transportation with no apparent prioritization system being used. General Peck also pointed out that in many cases, pallets were loaded and were then "lost" in the system for months. The composite wing can prioritize the loading and transportation of its own equipment. The loads will be based on what needs to be where and when, not who makes the first phone call or who has the best contacts.

Another argument regarding deployability is the large amount of ramp space and support facilities a composite wing requires once it is deployed. There is some validity to this, and if the squadrons need to be geographically separated, they may need augmentation. The composite wing is not well equipped to geographically separate its forces.[24] Colonel Remington of the 366th explained that a limiting factor for a composite wing is the structure of its squadrons. In his wing, the squadrons are considered dependent squadrons, which means they are manned and assigned support based on the fact that there are other squadrons on the base. The problem is that in a composite wing the squadrons have different aircraft, tools, equipment, specialists, and aircrews. Unlike in a wing flying the same aircraft, many of these in the composite wing are not interchangeable. The solution is to declare all of the squadrons independent and provide them with more equipment and manning. Unfortunately this is easier said than done since this will incur considerable cost. In addition, the number of aircraft assigned to the squadrons does not adequately cover their tasking. General Peck explained that the squadrons need to be larger to allow for periodic inspections, maintenance downtime, and supply shortfalls. A squadron in a composite wing does not have the other squadrons to fall back on for parts or people. The only way to provide the required capability in a composite wing is to assign more people and aircraft to the squadron. A third problem is that the priority the wing is given for obtaining spare parts is low. In the priority system, parts that are in limited supply go to overseas

bases first. Colonel Remington pointed out that the composite wings should enjoy at least the same priority as the overseas units, based on the reported importance of the composite wing to worldwide tasking. A big part of the problem, Colonel Remington believes, is that the composite wing is governed by rules that do not apply well to them. A significant problem is manning, because the USAF manning guidelines are written for a wing that has all the same aircraft. There is no allowance for four of five different fuel systems, for example, on one base.[25]

The last issue, that of credibility, is much tougher to evaluate at this stage. Solving the deployability problems outlined above will help to gain credibility. Certainly the ORI report adds credibility, but there are still many American critics that remain unconvinced. Credibility throughout the world is certainly a function of credibility in the United States. The fact is that as long as the US Air Force and the US military establishment are not behind the concept, it will be difficult to convince US allies of the ability and lethality of a composite wing. Potential adversaries will not be convinced until the allies are. General Kinnan described part of the USAF resistance to the CW as a "hangover" from the way it was reinstituted. General Peck agreed and pointed out that the intrusive and elitist way the 366th was originally formed built a bad reputation that his wing is still working to overcome. Both wings are well on their way to converting their critics. We will now turn to the USAF's other attempt at a Quick Response Airpower Force—the Airpower Expeditionary Force.

The Airpower Expeditionary Force

In his 1991 address to the Air Force Association Tactical Air Warfare Symposium in Orlando, Florida, General McPeak said the purpose of the composite wing is "to go to any spot on the earth quickly and conduct immediate air operations."[26] In chapter 2 we saw the need to have a rapidly deployable airpower force, and in chapter 3 we described what it should look like. Now that we have looked at the composite wing, are there any other alternatives?

History and Evolution

Recall from chapter 1 that in 1994 after the conclusion of Operation Vigilant Warrior, General Jumper began to think there was perhaps a better way. He charged his staff to create a "responsive and reliable airpower force able to drop bombs in 48 hours." He added that it must "demonstrate it can rapidly react to deter, to plus up theater forces during carrier gaps, to put the word expeditionary back into the Air Force vocabulary, and to demonstrate that we can respond and then bring the force back home."[27] This charge was the seed that grew into the Airpower Expeditionary Force concept.

The set of AEF requirements that General Jumper outlined was new, but the concepts certainly were not. AEF roots trace back to the same organizations as the composite wing; the 1st Observation Group of 1918, the Composite Air Strike Force of 1955, the Crested Cap forces of the 1960s and 1970s, and the Rapid Deployment Joint Task Force of the 1980s. The idea came up again at Headquarters USAF in the early 1980s. During that time Col John Warden and Majs Dave Deptula and John Piazza advocated "Air Legions" that would operate as air forces within the Air Force and would be task oriented.[28] The idea effectively withered on the vine until General McPeak published his 1990 article in the *Airpower Journal* and then delivered his speech to the Air Force Association in 1991. He followed up on those remarks in an address to the Air Force Association three years later saying, "The main point is that we are moving away from a period characterized by forward-stationing of forces to an era of stateside basing with combat forces configured in an expeditionary mode. Air and space power makes it possible for the United States to progress toward this concept without at the same time abandoning the idea of presence."[29] The history was there, the ideas were offered, but someone had to put them put them together and get behind the package. General Jumper and USCENTAF did just that.

If it appears that the origins and concepts of the AEF and the composite wings are very nearly the same, it is because the two are very difficult to separate. Two of the major differences lie in the location and disposition of the force while they are in the CONUS and some of the criteria that are currently published for each (e.g., response times, package sizes, and purpose of force). This discussion of the AEF will use the same methodology as the preceding composite wing discussion. To avoid a redundant analysis, whenever the two concepts carry the same explanation, we will refer to the composite wing discussion.

Current Status

The original Airpower Expeditionary Force Mission Statement reads, "A force designed to provide CINCs with wide-ranging airpower options which meet specific theater needs and are capable of spanning the spectrum of military response options from humanitarian relief to actual combat."[30] It was to be custom-designed for a specific need identified by a regional commander in chief (CINC)—for example, an increase in regional tensions, or a loss in normal airpower capability in-theater. The AEF was to field a preplanned, concentrated, synergistic force under a central AEF commander, similar to a wing commander. General Peck of the 366th Wing makes the point that we can think of an AEF as what has been known in the past as a provisional wing.[31] The AEF was to allow a concentration and prioritization of effort under decentralized execution orders similar to the operation of a composite wing. It was to be able to deploy within 24 hours and be flying combat sorties within 48 hours. General Jumper explained that it was important to develop this not only to provide the force when and

where needed but to be able to demonstrate to the CINCs that it could do the job. Only then would they be willing to reduce the forward-deployed forces in their theater, which would then reduce the USAF operations tempo (OPTEMPO). General Jumper regards the high OPTEMPO to be a critical problem that must be solved, and he is not alone. Without exception, every senior leader I interviewed expressed serious concern over how far their people and equipment were being pushed. General Jumper asserts that a credible AEF can considerably reduce time spent overseas. He also offered that the force could cover the "carrier gap" but then emphasized that replacing Carrier Battle Groups (CVBG) was not the main reason for the AEF.

In 1995 the Airpower Expeditionary Force concept got "off the ground." The first AEF was based on the need to both develop the concept and to augment the Operation Southern Watch force during a sanctions review in the Gulf.[32] A secondary need was to substitute for a CVBG during a carrier gap. The required characteristics were to be rapidly deployable, capable of 70–80 combat sorties daily in day-and-night operations, with mission capabilities of OCA, DCA, SEAD, and precision munitions deliveries. On 14 August 1995, the commander of Air Combat Command was briefed on the AEF option, followed by the commander in chief of US Central Command on 21 August and the chief of staff of the Air Force on 5 September. The buildup began on 25 October. Eighteen aircraft along with over 600 personnel from Moody AFB, Georgia (the host unit), and Shaw AFB, South Carolina, deployed to Bahrain. The first AEF was declared operational on 31 October, and its forces returned to the United States in December.

A second AEF is currently deployed to Jordan and will be there for a total of three months.[33] The force is composed of 12 F-16s from Moody AFB, six F-16s from Mountain Home AFB, four KC-135s from Fairchild AFB, Washington, and 12 F-15Cs from Langley AFB, Virginia. The Langley contingent is serving as the host unit and is providing the bulk of the leadership, people (500 out of 850), and base support.[34] With one month into the deployment, the AEF has met or exceeded its goals. According to the AEF commander, Brig Gen William R. Looney III, performance indicators so far are "off the charts."[35] Any future AEF deployments are at this point classified.

Problems and Solutions

In concluding this discussion of AEFs, we should again refer to the issues relating to the traits of a Quick Response Airpower Force. Concerning the main issue of readiness, it is difficult to tell from the few examples so far, but we can look at some of the subissues. Regarding the subissue of deployability, the first AEF was considered a success by USCENTAF and USCENTCOM. Many leaders, however, including Lt Gen James F. Record, Twelfth Air Force commander, believe that the AEF is still being developed and "hasn't been really exercised yet."[36] He also

believes that the AEF is a good idea as long as it deploys to a "warm base," or a base that already has infrastructure and support. This point is a central assumption to the AEF. The design is based on prepositioned munitions and other equipment (similar to the composite wing), which also impact the force's sustainability. General Jumper considers this part of the political-military challenge and has attacked it head on. To ensure that the materiel is there when needed, he is forging strong relationships with the beddown countries. He considers this an important task for the first set of AEFs in the next few years. In Bahrain, for example, AEF personnel helped the Bahrain air force with aircraft maintenance and inspection techniques, flight tactics, and infrastructure construction. General Jumper was later told by a Bahrain air force official that "the techniques taught to us have advanced our force two years in only six weeks."[37] He believes that the biggest stumbling block to AEF operations is in the political-military arena. The general also believes that it holds the key to ensuring that stocks can be prepositioned and that diplomatic clearances can be preapproved in the event of a contingency. General Jumper also points out that as the benefits of hosting an AEF are advertised around the world, there should (and have been) more offers to host an Airpower Expeditionary Force. These efforts will lighten loads and enable the force to deploy quicker and lighter.

Concerning the subissue of employability, again there remains a lot of work to be done, but advantages and disadvantages have already surfaced. As Col Mark Welsh of the 347th points out, the synergy just is not the same in an AEF as that in a composite wing. This is a problem that can only be solved with additional training, and I will address this subject in chapter five. Decentralized execution and the synergy gained by having all the assets at one installation during the employment, however, are the same for the composite wing.

The last subissue, credibility, is most critical to an AEF. If the CINCs and potential adversaries do not believe that an AEF can deploy a lethal airpower force within hours, there is no reason to have an AEF. As with the composite wing, solving the above problems is a good start.

Assuming they are resolved, the single best action to improve credibility will be exposure. General Kinnan of the 347th stressed that the AEF needs to be "played up" in the press. The world needs to know that when called on, it can be there to deter or fight within 48 hours. The concept is new and many details have to be worked out, but the idea has a lot of potential.

This discussion of composite wings and Airpower Expeditionary Forces has really just scratched the surface. Combined with an understanding of what is required and what has been done in the past, we can now look to the future. In the next chapter we will examine how the existing organizations can be transformed and taking the strengths of each, merged into the Quick Response Airpower Force.

Notes

1. Merrill A. McPeak, "For the Composite Wing," *Airpower Journal* 4, no. 3 (Fall 1990): 4.

2. Lucien H. Taylor, *America's First Eagles* (San Jose, Calif.: Bender Publishing, 1983), 76.

3. A detailed discussion of these unit histories is beyond the scope of this study. For a more comprehensive history of composite groups from World War I to Operation Desert Shield/Desert Storm, see James E. Moschgat, "The Composite Wing: Back to the Future!" (thesis, School of Advanced Airpower Studies, Maxwell Air Force Base (AFB), Ala., 1992).

4. Earl H. Tilford Jr., *Setup: What the Air Force Did in Vietnam and Why* (Maxwell AFB, Ala.: Air University Press, 1991), 33.

5. Moschgat, 66.

6. J. Scott Norwood, *Thunderbolts and Eggshells: Composite Air Operations during Desert Storm and Implications for USAF Doctrine and Force Structure* (Maxwell AFB, Ala.: Air University Press, 1994), 8.

7. Andrew Compart, "The Mission Begins," *Air Force Times*, 25 December 1995, 12–13.

8. The RAND study found that "Support costs don't prohibit organizing Composite Wings." The study stated that the open issue was how much a composite wing's effectiveness was increased. RAND concluded that "If Composite Wings can improve combat effectiveness by at least one percent, they would achieve a given level of effectiveness more efficiently than the current structure." See Raymond A. Pyles, John Folkeson Jr., and Gary F. Mills, *Composite Wings: Needs, Costs, and Options* (Santa Monica, Calif.: RAND, 1992), 43.

9. The GAO did not support the composite wing concept, but their finding was based on their belief that the USAF had not adequately studied the concept, its potential problems, or its ramifications. It was more of an indictment of the decision than the concept. See United States General Accounting Office (GAO), *Air Force Organization—More Assessment Needed Before Implementing Force Projection Composite Wings* (Washington, D.C.: GAO, 1993).

10. This study concluded that a properly trained and equipped composite wing can be more effective and survivable than a comparable monolithic force. Also, to train a monolithic force under today's system would cost more than the price of the composite wing. See Maj James J. Gallagher, USAF, "366th Composite Wing Cost and Combat Effectiveness Analysis," report (Langley AFB, Va.: Air Combat Command Studies and Analysis Group, 1995).

11. The 23d Wing is an Airland Operations wing similar in concept to the 347th Wing and because of limited funds, time, and space it was not included in this analysis.

12. Headquarters Air Combat Command (ACC), Directorate of Plans and Programs, *ACC Concept of Operations for the 347th Wing, Moody AFB, Ga.* (Langley AFB, Va.: ACC, 31 October 1995), vi.

13. 347th Operations Support Squadron, *347th Wing Six Month Training Plan, Jan–Jun 96* (Moody AFB, Ga.: 347th Operations Support Squadron, 5 December 1995), 1.

14. Col Mark Welsh, USAF, 347th Operations Group commander, interviewed by author, 22 February 1996, Valdosta, Ga.

15. Brig Gen Timothy A. Kinnan, 347th Wing commander, USAF, interviewed by author, 22 February 1996, Valdosta, Ga.

16. Ibid.

17. Headquarters 366th Operations Group, *Operations and Training Guide, 1 Jan–30 Jun 96* (Mountain Home AFB, Idaho: 366th Operations Support Squadron, 1 January 1996), 1.

18. The Air Combat Command inspector general defines Benchmark Candidates as: "Ideas or practices which are worthy of commandwide attention. They are identified under 'Strengths' followed by the process owner's office symbol and DSN in parenthesis. Units can expect to receive inquiries from other agencies on their Benchmark Candidates." See ACC, Office of the Inspector General, *Operational Readiness Inspection Report 17–31 July 1995* (Langley AFB, Va.: ACC, 31 July 1995), 200.

19. Brig Gen William A. Peck Jr., 347th Wing commander, USAF, interviewed by author, 19 March 1996, Mountain Home, Idaho.

20. Headquarters 366th Operations Group, *Operations and Training Guide*, 3.

21. Jeffrey A. Remington, USAF, 347th Operations Group commander, interview by author, 18 March 1996, Mountain Home AFB, Idaho.

22. Ibid.

23. ACC, Office of the Inspector General, 54.

24. *ACC Concept of Operations for the 347th Wing*, 7.

25. Remington.

26. Gen Merrill A. McPeak, USAF, chief of staff, address to Air Force Association Tactical Air Warfare Symposium, Orlando, Fla., 31 January 1991, quoted in Merrill A. McPeak, *Selected Works 1990–1994* (Maxwell AFB, Ala.: Air University Press, August 1995), 11.

27. Lt Gen John P. Jumper, USAF, commander, United States Central Command Air Forces and Ninth Air Force, interviewed by author, 20 February 1996, Sumter, South Carolina.

28. Norwood, v.

29. Gen Merrill A. McPeak, address at Air Force Association Symposium, Orlando, Fla., 18 February 1994, quoted in Merrill A. McPeak, *Selected Works 1990–1994*, 291.

30. Lt Gen John P. Jumper, USAF, commander, US Central Command Air Forces and Ninth Air Force, briefings delivered to Gen J. H. Binford Peay III, USA, commander, US Central Command, and Gen Joseph W. Ralston, USAF, commander, Air Combat Command, November 1995.

31. Peck.

32. Periodic sanction reviews typically precipitate moves by Saddam; see Jumper briefings to USCENTCOM and ACC.

33. Bryant Jordan, "Fighters, tankers deploy to Jordan," *Air Force Times*, 22 April, 1996, 4.

34. Julie Bird, "Fighters, tankers get Jordan job," *Air Force Times*, 18 March, 1996, 4.

35. Brig Gen William R. Looney III, USAF, commander, 4417th Air Expeditionary Force, article titled "How Are We Doing?" written for 4417th AEF deployed newsletter, Shaheed Mwaffaq Air Base, Jordan, May 1996.

36. Lt Gen James F. Record, USAF, commander, Twelfth Air Force, interviewed by author, 6 March 1996, Tucson, Arizona.

37. Jumper briefings, November 1995.

Chapter 5

The Force Tomorrow

I am quite confident that in the foreseeable future armed conflict will not take the form of huge land armies facing each other across extended battle lines, as they did in World War I and World War II or, for that matter, as they would have if NATO had faced the Warsaw Pact on the field of battle.

—Gen H. Norman Schwarzkopf

The requirement for some type of quick response airpower in the US Air Force is real and immediate. We are now armed with the knowledge and understanding of the lessons from previous attempts, the tools available today to create the force, and what capabilities are necessary to make the force fit the requirement. With this, we can create the model force. In this study the model force is actually a combination of forces, organizations, and capabilities. There is no perfect solution, and trade-offs are always going to be necessary, particularly when budgetary considerations are factored in. With this in mind, I offer a model that by and large uses the Air Force of today. Before explaining the model, an explanation regarding the name is appropriate.

The name "Quick Response Airpower Force" is not as important as the concept in aggregate. In fact, the term "Airpower Expeditionary Force" could effectively be used. The reason for my not using it in this discussion is that it would confuse the issue. Calling General Jumper's AEF "AEF #1" or "Jumper's AEF" and my concept "AEF #2" or "Thompson's AEF" (or any similar scheme) would be confusing and counterproductive. For the sake of this study it is much simpler to give it another name.

The name "Airpower Expeditionary Force" is, in fact, appropriate and it says a lot in just three words. Webster's dictionary defines expeditionary as "sent on military service abroad" or "constituting a journey or excursion undertaken for a specific purpose." The names "airpower" and "force" have obvious utility and are necessary.

In creating the force for tomorrow using existing organizations, the ideal solution is to draw from the strengths of each organization. The model below is not one organization, but a group of different organizations with common traits that complement each other, drawing on strengths and compensating for limitations. The solution I propose is to have a three-tiered Quick Response Airpower Force.

The Air Force and the QRAF

It would be unrealistic and cost-prohibitive to have an Air Force composed of many standing QRAFs as described in chapter three, regardless of their capability. This proposal is a compromise. I propose that the US Air Force organize three tiers of QRAFs, each designed with a purpose in mind. All three should be similarly equipped and capable of the same task organized mission in varying degrees of expertise and readiness. In addition, the three QRAF tiers will have characteristics that support the tenets of airpower as discussed in chapter 3. The proposed Quick Response Airpower Force levels are Level 1, a standing QRAF of geographically collocated units, organized, trained and equipped for tasking at any time, anywhere; Level 2, a preplanned QRAF of geographically separated units organized and designed well in advance for a specific deployment; and Level 3, an ad hoc QRAF designed in the event that Levels 1 and 2 are already occupied or committed—a tertiary capability that becomes institutionalized into the US Air Force.

QRAF Level 1

This QRAF will be the "911" force for the CONUS Air Force. This option is best suited for the 366th at Mountain Home AFB or a wing of similar composition.[1] It will be a composite wing (possibly two), equipped with the quality and quantity of equipment required to generate, deploy, and employ the lethal and credible deterrent described in chapter 4.[2] The unit will be capable of the air interdiction, strategic attack, close air support, offensive counter air, defensive counter air, suppression of enemy air defenses missions, and other support missions. It will routinely deploy to gain experience in areas that the Joint Chiefs of Staff identify as possible threat areas. As a goal, these deployments will be separated by 18 months to two years, and real-world contingency deployments will count towards that constraint (world situation allowing). These deployments can also be groundbreaking operations that lay the foundation for future QRAFs in the region.[3] The wing will exercise its mission in the manner that the 366th Wing has already established, with local composite wing training conducted as often as possible. In addition, the wing will exercise its mission on all its deployments to flag and JCS exercises. In other words, Red Flag (and others) will set aside periods for the wing to operate as a QRAF. This organization and training concept will create and maintain a flexible and versatile team. The NCA will have this QRAF at its disposal whenever and wherever airpower is needed at a moment's notice.

QRAF Level 2

Units for this level will be drawn from those not participating as Level 1 wings. The units may be dependent squadrons from monolithic wings and/or independent squadrons from non-QRAF composite wings (the

same will be true for Level 3 units). Level 2 is designed to work preplanned QRAF deployments. These deployments can occur for a variety of reasons: an agreement with an ally, a long-range request from a commander in chief, a preplanned overseas exercise, or a carrier gap. Regardless of the reason, a QRAF Level 2 will be organized a minimum of six months prior to the actual deployment. Participating units, including the core (or host) unit, will be identified at that time. Participants may—and should—include the Air National Guard and the Air Force Reserves. The host unit will be responsible for providing senior leadership and the bulk of the base support equipment and personnel. The host unit will also coordinate with the assigned parent numbered air force for the necessary air operations center support. The importance of the host unit cannot be overemphasized.[4] The value gained from continuity in support and leadership was an important lesson from the 1995 AEF in Bahrain.[5] The preplanned QRAF will be scheduled to attend a flag or equivalent exercise three to four months prior to the deployment. At this exercise the QRAF will emphasize synergistic operations that will enable it to efficiently concentrate force and persist on target when required. The timing will be managed in order to allow adequate preparation time for the exercise and then adequate time to draw and implement lessons learned prior to the deployment.[6]

QRAF Level 3

This QRAF would be drawn from units not on Level 1 or scheduled for Level 2.[7] This capability will be institutionalized into the Air Force, and it could ideally be exercised once per year. Realistically though, with the other two levels being trained and exercised, it probably will not be possible in the first years of the QRAF. As people are transferred from units that have participated in a QRAF, the USAF core competency will obviously increase. In addition, units that have deployed under a Level 2 in the past could be tasked to accomplish a Level 3. The intention is to have the capability and the structure in place but to use it only when necessary. This level of QRAF is similar to what an Airpower Expeditionary Force is today.

Multiple Contingencies

In the event that the QRAF Level 1 unit is deployed and another real-world contingency demands an airpower force, the option of sending one of the last preplanned QRAFs will be considered. This is assuming there is only one QRAF Level 1 unit. The second option will be to send a preplanned QRAF that has trained and planned to go on a deployment but has not deployed yet. The third option is to generate a QRAF Level 3.

Numbered Air Force Support

Integrated into all QRAF levels will be the active support of the numbered air forces. They will provide air operations centers, furnishing the

expertise, manning, and equipment for standard combat operations and combat plans functions. There will be an air operations center created for all real-world QRAF deployments and off-station peacetime QRAF exercises as a minimum. QRAF units will not be trained, manned, or equipped to operate an AOC.[8] Numbered air forces will furnish "Quick Reaction Package" AOCs for local composite wing training exercises as available. This support can be in place of, or in conjunction with, ACC Blue Flag exercises. The advantage of this proposed support over a standard Blue Flag is that the AOC will be tasking and controlling real sorties versus computer simulations. These exercises will give the organizations involved the opportunity to reinforce their adherence to the tenet of centralized control/decentralized execution.

Implementation

Oversight of this program should be by Air Combat Command (ACC). The program should be a high priority and should be staffed by appropriately skilled and experienced personnel. The group should include representation from all major functional areas. Headquarters USAF, numbered air force, and base-level public affairs organizations must be dynamically involved. The QRAF's abilities need to be widely publicized. This will help implementation, acceptance, and credibility worldwide. The implementation of this system will be without growing pains. Process action teams should be organized from the units affected, including the Guard and Reserves. The opportunity for success will be increased if those that are to implement the systems are involved in the details of their design and implementation. Apart from the changes that the 366th will go through (with aircraft, equipment, and manning), there will be a period of demonstration. This period will be required to convince the National Command Authorities and the regional CINCs that the system can respond, and the forward presence can be reduced. Until such time, the OPTEMPO will most likely remain high or even increase.

Before this plan is implemented, an agreed "go/no go" date should be set to prevent the demonstration phase from becoming standard operations. All of the QRAFs will participate in other service and JCS exercises, such as Bright Star, to the maximum extent possible. The QRAFs will profit from the experience and exposure while the other services will see the QRAF in action. The 1995 ORI of the 366th Wing will be the model for evaluations. QRAF Levels 1 and 2 can expect similar evaluations.

This plan is designed for CONUS-based forces to rapidly deploy overseas. The initial concept is not to include the use of US forces in Europe and Asia. After the QRAF concept is proven, the expensive frontline, forward-based airpower may be reduced and brought back to the major centers of their respective regions. This concept needs considerably more study. Refer to chapter 6 for more recommendations for further study.

The United States needs some type of rapidly deployable, expertly employed airpower force. The current USAF Composite Wing and the

Airpower Expeditionary Force are a great start, but we have seen that the changing world and its accompanying challenges dictate that more needs to be done. Secretary of the Air Force Widnall emphasized this point in her *1995 Annual Report to the President and the Congress:*

> Finally, in response to the burgeoning requirements of engagement, the Air Force has reconceptualized presence—what it is, why we do it, and how best to support joint requirements. Our concept of presence includes all peacetime applications of military capability that promote U.S. influence. Correspondingly, the way we exert presence is changing. We are augmenting a reduced permanent presence with systems linked to joint military capabilities that can be brought to bear either proactively or *just-in-time* (emphasis added).[9]

The three-tiered Quick Response Airpower Force presented in this chapter uses forces that exist today in the Air Force to provide for that just-in-time capability Secretary Widnall speaks of.

Notes

1. The Airland Composite Wings at Moody Air Force Base (AFB), Ga., and Pope AFB, N.C., are intentionally left out of the QRAF Level 1. As they exist now, they are not equipped for a QRAF Level 1 mission but could be augmented under a Level 2 plan. Perhaps after careful analysis of their missions and purpose they may be expanded with more support assets, such as SEAD F-16Cs, air superiority F-15Cs, and increased interdiction and strategic attack assets such as the B-1B and the F-15E. Until then, it is best to leave them to the Airland mission. This opinion was corroborated by General Kinnan, 347th wing commander, in a interview by the author, 22 February 1996.

2. The idea of a composite wing being the Airpower Expeditionary Force of tomorrow or that they will merge is widely held by those involved in both composite wings and AEFs. One out of two numbered air force (NAF) commanders, both composite wing commanders, and one out of two operations group commanders that the author interviewed agreed.

3. Recall in chapter 4 that General Jumper stressed the benefits and importance of these groundbreaking operations. They can better relations and enable the United States to build the infrastructure and preposition the equipment needed for the AEF/QRAF concept to work. The deployments forge agreements for future operations and deployments as well as near-unrestricted access to the area during a crisis. Lastly, they can demonstrate the capability of a QRAF to regional allies and potential aggressors, contributing to political stability and deterrence.

4. A lesson from the first AEF was that parceling out operational support squadron functions from different wings was ineffective and inefficient. The support package needs to be centrally planned, controlled, and commanded by the host unit. Lt Col Tomas J. McKinley, USAF, 347th Operational Support Squadron commander, interviewed by author, 21 February 1996, Valdosta, Ga.

5. General Peck discussed at length the importance of "leadership continuity." Brig Gen William Peck, 347th Wing commander, interviewed by author, 19 March 1996, Mountain Home AFB, Idaho.

6. Lieutenant General Record believes that the problem of exercise quality versus quantity needs to be addressed. He points out that many people erroneously believe "the more the better." He asserts that units are not given adequate time to draw lessons and implement needed changes before they must prepare for their next exercise. Lt Gen James F. Record, USAF, commander, Twelfth Air Force, interviewed by author, 6 March 1996, Tucson, Arizona.

7. The pool of available units should be managed by Air Combat Command. Considerations for inclusions and priority should be the last QRAF Level 2 participation, other commitments/deployments, and JCS/CSAF guidance.

8. The reader may be aware of previously published procedures for composite wings to operate small-scale air operations centers. According to both General Jumper and General Record, they would never ask a wing commander to plan and conduct an air campaign as a JFACC. They both emphatically stated that it is the job of the NAF, not an operational wing. The concept of operations for both the 366th and 347th Wings (both published by Air Combat Command) have deleted that requirement and neither wing intends to operate an AOC.

9. Department of Defense, *Report of the Secretary of Defense to the President and the Congress* (Washington, D.C.: Government Printing Office, 1995), 295.

Chapter 6

Conclusion

If the world is going to have only one superpower, thank God it is the United States of America.

—Lt Gen Prince Kalid Bin Sultan al-Saudi
Commander, Royal Saudi Air Defense, 1991

This analysis has explored the need and means to provide the National Command Authorities with a responsive and credible airpower force. This force must be able to effectively and efficiently deter aggression wherever United States national interests are at stake, as well as be ready to defeat the aggression if deterrence fails. This proposal to create a Quick Response Airpower Force is rooted in airpower history, and it is based on a practical approach using existing forces. While this study addresses many issues, much work remains to be done. In this last chapter, I will offer recommendations for some of this work, as well as limitations of the study and its implications.

Recommendations for Future Study

This study is just the beginning. Due to its size and scope, there remains many unanswered questions and there is much work to be done. Before the QRAF can be inaugurated, the following studies should be conducted.

1. A comprehensive and independent study on composite wings should be commissioned by the USAF. It should get high-level attention and be an influence in the shaping of USAF policy. In this study, I assumed that composite wings were here to stay. As I mentioned in chapter 4, composite wings have been, and still are, the subject of numerous debates. There have been many separate studies on varied aspects of the wings, but no one has done a comprehensive study examining their cost, efficiency, and relevance today. No study has tied all of the contemporary issues together. Meanwhile there is general agreement that composite wings are more capable and prepared to operate in a multimission environment than a monolithic wing. The dispute typically centers over whether composite wings are needed based on the world situation and if the increase in capability is worth the added expense. This needs to be studied, and then the USAF leadership needs to make a decision. Composite wings are misunderstood by supply and personnel policy makers. The result is that the units are neither equipped nor manned to the levels required. Many composite wing leaders feel that they are asked to do a job but are not given the required tools. One highly placed individual

mentioned that his organization maintains a specific capability that they do not intend to use. By keeping this capability on the books, they are able to keep the personnel slots associated with the capability. This has been the only way they have been able to overcome shortfalls in manning. A decision needs to be made—disband the composite wings or provide them the tools to do the job.

2. A comprehensive and independent assessment also needs to be done on the QRAF. The following are specific areas that should be looked at.

—*The threat and the extent of forward presence required.* Does the threat warrant a QRAF? Will senior US leadership reject a reduction in forward presence regardless of the ability of airpower to respond? Will the political constraints outweigh OPTEMPO and military readiness issues? Considering the anticipated threat, political considerations, and NCA and CINC preferences, how many preplanned QRAFs will be required per year?

—*Measures of merit.* What can be used to demonstrate that QRAF can replace a portion of the forward presence in a theater? How long will the "proof of concept" or demonstration phase take? Will policy makers agree to a "go/no go" date that will force them to make a decision and prevent the demonstration phase from continuing indefinitely?

—*QRAF size(s).* How big does a Quick Response Airpower Force need to be (aircraft, personnel, and equipment)? Can and should there be a preapproved, preplanned menu of package sizes tailored to specific missions, theaters, and contingencies from which a CINC chooses?

3. Regardless of whether the QRAF concept is accepted, numbered air forces and their units need to form teams to aggressively study how to decrease the deployment lift requirements. Pertinent studies should include the following:

—*Reachback Technologies.* Currently the Advanced Research Projects Agency (ARPA), Rome Laboratories, Air Combat Command, and the numbered air forces are all working independently to keep more command, control, communications, computers, and intelligence (C^4I) out of the forward area.[1] These projects are aimed at allowing those in the forward area to "reachback" to the information and associated systems. General Jumper points out that there is tremendous potential in this field but that the various efforts need to be coordinated and focused. He believes that Air Combat Command could be the lead agency for developing these systems.[2] There are many ways to reduce this forward presence of equipment in theater. General Jumper explained that the capability exists today to leave target databases behind and connect to them when required.

This is only the beginning. He envisions a day when the joint force air component commander can leave the bulk of the AOC back in the United States. The JFACC could plan and coordinate the beginnings of the air campaign while he is en route to the theater in an aircraft equipped with

the appropriate equipment and communications equipment. Meanwhile a prepositioned or rapidly deployed contingent is in-theater providing the JFACC with necessary on-scene information and preparing the initial contingency plans.[3] The possibilities are endless in this area.

Communication and computer technology advances will play a large part in the development of reachback concepts. Robust, redundant, and secure communication systems will allow rapid and reliable transmission of data to allow more to be left behind. Advances in computer technology will allow burst transmissions over new communications systems, but they will also provide the JFACC and his staff connectivity across the oceans while he is in transit. Virtual reality is another possible use of new and powerful computer systems. The AOC could reside in a virtual reality environment. Participants in the functions of the AOC operation could be scattered over the globe, close to the equipment, or information they need to accomplish their job but linked together in cyberspace. Technology research and development is only half of the work that will have to be done in the field of reachback. The other half will be to study the human factors of such systems. Humans that normally rely on personal contact and physical presence may have limits (or believe they have limits) on their ability to operate in this type of environment. Those that are unfamiliar with this environment may be reluctant to rely on it. There is a lot of work to be done regarding reachback, but it has potential to make a deployment much lighter and faster. The AOC equipment itself is only part of the savings in lift. People and equipment not forward deployed will be out of the threat area and will not require theater support and security. The additional savings in personnel and supporting equipment required for shelter, security, power generation, and climate control will be substantial.

—*Prepositioning*. Another way to reduce the lift into theater is to preposition equipment and supplies. Studies to determine what can be stored and for how long are necessary to avoid unpleasant surprises later. Innovative ideas such as the USCENTAF "AEF hotel" need to be aggressively pursued.[4] Work such as this can enable the QRAF, or any other force, to pack and deploy faster, requiring less support once in place in-theater.

All of these recommendations are designed to further the Quick Response Airpower Force concept. This is by no means an all-inclusive list. The search for new and innovative ideas must never stop.

Limitations

There are a few unavoidable limiting factors in this study. First, this study is unclassified and based entirely on open sources. To do a complete and thorough analysis of the feasibility of the QRAF, classified sources may need to be used. Second, this study assumes that composite wings are not going to be disbanded and that their capability is important to the Air Force. In

addition, I am assuming that the composite-wing problems I identified in chapter 4 will be corrected (problems with numbers of aircraft, supplies, and personnel). This QRAF proposal depends heavily on the composite wing concept. If the composite wings were to be disbanded, the QRAF Level 2 would be the highest state of readiness attainable. Another limitation is that the study relies heavily on personal interviews and briefings. In the case of Airpower Expeditionary Force and the Quick Response Airpower Force concept, there is very little published open-source information. Furthermore, most of the individuals that are knowledgeable regarding this issue are close to the problem, and their keen interest in the subject can potentially affect their objectivity.

Implications

The new Quick Response Airpower Force has the potential to have a significant impact on the way USAF airpower is employed in the future. Some of the implications are obvious, and they are the primary reasons for instituting the change, while others may not be intentional or apparent.

The QRAF should change USAF institutional thinking by getting people into the expeditionary mindset General Jumper spoke of. The new system will foster more innovative ideas and suggest new ways to apply airpower around the world. The concept of global presence will be affected as well. CINCs will be able to rely on the QRAF to provide a deterrent potent enough to reduce the current forward presence. Reductions in operations tempo will follow. Retention of quality people will increase and wear and tear on equipment will be reduced. Relations with US allies will improve due to the demonstrated commitment to a quick response. Many countries are sensitive to appearing excessively reliant on the United States, and the reduced presence will help in that regard while still providing the security for both the ally and the United States.

While this system is designed for the CONUS-based force, after proof of concept it may be applied to US forces in Europe and Asia. Expensive frontline locations that may require extensive security precautions can be drawn down and units can be brought to fewer bases in more central and secure areas. Resupply and living conditions can also be made easier and more pleasant.

Another implication is the potential conflict with the US Navy. This should be treated carefully. If the QRAF concept is "sold" as an alternative or as a replacement for a carrier battle group (CVBG), the QRAF could stimulate unnecessary opposition. It is important to note that General Jumper insists that the AEF is not a replacement for a CVBG.[5] The Quick Response Airpower Force relies on basing and overflight rights. While the land-based operations are more sustainable and project more force, the only presence (short of a Global Reach intercontinental bomber) that is independent of basing is the carrier battle group. Both the QRAF and the

CVBG offer important complementary capabilities and are not mutually exclusive. The QRAF should not compete with the CVBG.

In the event the QRAF is not instituted, a last implication is that many of the concepts, systems, and recommendations can and should be applied to the current Airpower Expeditionary Force.

Conclusion

Exactly what the future holds for the United States is anyone's guess. One thing that is certain though, we can assume that our nation will remain globally engaged for many years to come. We can also assume an integral part of that global engagement will be the projection of military power. In his national security strategy, President Clinton underscores this by saying, "Military force remains an indispensable element of our nation's power. Our nation must maintain military forces sufficient to deter diverse threats and, when necessary, to fight and win against our adversaries."[6] In today's fiscally constrained environment, the United States must be able to effectively meet these challenges using the most efficient means possible. Airpower offers the best mix of efficiency and effectiveness in the deterrence of aggression and engagement of potential global adversaries. Airpower's speed, range, and flexibility generally give it an advantage over other military instruments in many unexpected crises. It is becoming increasingly dominant in joint operations due to these characteristics and because it allows the NCA the use of a credible force while avoiding putting a significant—and possibly unpopular—number of American troops in harm's way. Airpower is becoming the quick-response weapon of choice, both for reasons of military effectiveness and political realities. Part of this airpower is the United States Air Force, and part of the United States Air Force should be the organized into the QRAF.

In her concluding remarks to the president and Congress, Secretary Widnall stated, "The declining size of our military demands the abandonment of the business as usual mindset. Innovative thinking is key to reducing duplication and getting the most from our defense budget."[7] The QRAF is a product of that innovative thinking. The next time a regional commander in chief needs to project power quickly and convincingly, as was the case with Operation Vigilant Warrior in 1994, the Quick Response Airpower Force should be his unquestioned weapon of choice.

Notes

1. Col Edward Patneaud, Defense Advanced Projects Research Agency, address to the School of Advanced Airpower Studies, Maxwell Air Force Base, Alabama, 15 February 1996.

2. Lt Gen John P. Jumper, USAF, commander, United States Central Command Air Forces and Ninth Air Force, interviewed by author, 20 February 1996, Sumter, South Carolina.

3. Ibid.

4. The CENTAF AEF Hotel bridges the gap between arrival and tent city construction. The "Hotel" is a K-span that is used to store prepositioned supplies and equipment. Upon arrival, personnel remove the equipment and turn the K-span into a temporary living facility. This allows the initial lift and effort to be concentrated on the operation and critical support during initial days of the deployment. Jumper interview, 20 February 1996.

5. Jumper interview.

6. President of the United States, *A National Security Strategy of Engagement and Enlargement* (Washington, D.C.: Government Printing Office [GPO], 1995), iii.

7. Department of Defense, *Report of the Secretary of Defense to the President and the Congress* (Washington, D.C.: GPO, 1995), 301.